

# Reiter's syndrome with parotitis in the female

## A case report

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Reiter's syndrome most frequently presents with abacterial urethritis, conjunctivitis, and polyarthritis. It is of uncertain aetiology and occurs either as a sequel to venereally transmitted urogenital infection or after dysentery. The syndrome is much more common in the male (97 per cent of Csonka's series of 300 cases reported in 1966) though greater difficulties of diagnosis in the female may contribute to this difference. Parotitis is mentioned only rarely as part of the dysenteric syndrome, and does not appear to have been reported in the venereal type or in the female; such an occurrence prompts this communication.

### Case report

A 27-year-old woman had noted urethral irritation, slight dysuria, and increased frequency of micturition for 5 weeks, which had failed to respond to courses of nitrofurantoin and ampicillin, and 6 days before admission blurred vision and sore, sticky eyes with purulent discharge had been treated with chloramphenicol drops without improvement.

For 3 days stiffness had been marked in the right knee, right second toe interphalangeal joint, left ankle, and left middle finger metacarpophalangeal and proximal interphalangeal joints. Right facial swelling had also been noted for 3 days.

The patient had had a regular consort for the previous 3 years, during which time she had taken oral contraceptives.

### Examination

Temperature was raised to 38°C. There was bilateral purulent conjunctivitis, and a non-tender, non-fluctuant right parotid swelling without discharge. There were no buccal or skin lesions. The joints involved were painful with reduced power and range of movement, and there was local tenderness, erythema, and raised temperature. The respiratory and cardiovascular systems were normal, and there was no lymphadenopathy or hepatosplenomegaly.

### Investigations

Hb 11.6 g./100 ml.; packed cell volume 35 per cent; white blood cells 9,000/cu. mm., with normal differential count. Erythrocyte sedimentation rate 80–136 mm./1st hr on six occasions.

Urine moderate proteinuria, more than 30 W.B.C. per 1/12 field, but no growth on culture. Conjunctival swabs sterile.

X-rays of chest, sacro-iliac joints, and affected joints normal. Electrocardiogram normal.

Biochemistry normal, apart from moderate hypoalbuminaemia.

Autoimmune factors were absent, tests for L.E. cells, antinuclear and rheumatoid factors, thyroid and gastric antibodies being negative, and the antistreptolysin-O titre normal.

Sarcoidosis was not evident clinically and a Kveim test was negative, while absence of conjunctival Rose-Bengal staining and normal Schirmer tests were against a diagnosis of Sjögren's syndrome. The Wassermann reaction was negative. Extensive virological investigation\* yielded negative results. The Mantoux test 1 in 1,000 gave a moderate reaction and urine examination showed no acid-fast bacilli. No evidence was found of trichomonads, gonococci, or mycoplasmas.

### Progress

There was gradual resolution of symptoms with rest in bed, and pain was relieved by salicylates. Sulphonamide eye drops worsened the conjunctivitis; a fine maculopapular rash from the ankles to the knees developed and persisted until the sulphonamide was discontinued. A course of tetracycline may have helped improvement; after 3 weeks the temperature became normal and pyuria lessened.

The parotitis slowly resolved concurrently with the arthritis. The duration of the parotid swelling was 3 weeks.

\*Complement-fixation tests with paired specimens of sera against Influenza A and B, Mumps, Sendai, *Mycoplasma pneumoniae*, Respiratory syncytial virus, Adenovirus, Cytomegalovirus, Herpes simplex, *Coccidia burnetii*, Psittacosis—lymphogranuloma venereum, Varicella—zoster, Measles, Parainfluenza iii. Haemagglutination inhibition test against rubella.

## Discussion

The urogenital, ocular, and articular features of this case are typical of Reiter's syndrome. In support were the findings of 3 weeks' pyrexia, a very high E.S.R., a characteristic course, and the exclusion (clinically and by special investigations) of other conditions.

Besides urethritis, conjunctivitis, and polyarticular arthritis, many other systemic manifestations of this syndrome have been reported (Paronen, 1948; Hancock, 1965). These include anterior uveitis, circinate balanitis, buccal erosions, and keratoderma blennorrhagica. Neurological abnormalities are reported in 1 per cent. of cases as polyneuritis, shoulder girdle neuritis, transient hemiplegia, or meningoencephalitis (Oates and Hancock, 1959; Catterall, Rooney, and Kirby, 1965). Cardiovascular abnormalities include varying degrees of heartblock, myocarditis, and, in severe recurrent disease, aortic incompetence (Csonka, Litchfield, Oates, and Willcox, 1961; Rodnan, Benedek, Shaver, and Fennell, 1964). Many other manifestations are reported, such as lymph node, spleen, and salivary gland involvement, pleurisy, and discrete pulmonary infiltration.

Parotitis has been reported by a number of authors (Sick, 1918; Manson-Bahr, 1920, 1943; Otto, 1940; Hoff, 1940; Holler, 1941). These cases were associated with wartime dysentery and perhaps therefore with dehydration. They were thought by Hancock (1965, and personal communication) to be coincidental because in almost all respects post-dysenteric Reiter's disease does not differ from that following sexually acquired infection, yet no venereal case with parotitis had previously been reported. Manson-Bahr (1920) suggested that parotitis was not coincidental, and noted three dysenteric cases in which parotitis occurred at the same time as the onset of arthritis in patients without evidence of other oral pathology.

## Summary

A case is recorded of Reiter's syndrome with parotitis in a 27-year-old woman. The parotitis began and resolved at about the same time as the arthritis and conjunctivitis. This would appear to be the first recorded case of parotitis in the venereal form of

Reiter's syndrome, and the first in a female. Cases of parotitis which have been observed in the post-dysenteric form of Reiter's syndrome would suggest that parotitis is an uncommon but definite manifestation of this disease.

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## Syndrôme de Reiter avec une parotidite chez une femme: rapport d'un cas

### SOMMAIRE

On rapporte un cas de syndrôme de Reiter avec parotidite chez une femme de 27 ans. La parotidite commença et guérit à peu près en même que les arthrites et la conjonctivite. Il semble que ce soit le premier cas rapporté de parotidite dans la forme vénérienne du syndrôme de Reiter, et le premier chez une femme. L'existence de cas de parotidite dans la forme post-dysentérique du syndrôme de Reiter semble suggérer que la parotidite est une manifestation peu commune mais caractéristique de la maladie.